Stormwater Action Monitoring - Effectiveness Studies

Project: Evaluation of Hydraulic Control Approaches for Bioretention

Washington State University and Geosyntec Consultants

Deliverable 1.1: Meeting Notes from TAC Kickoff Call

March 5, 2020

Meeting Overview and Attendees

The TAC Kickoff meeting was held remotely on February 26th. A slideshow was presented during the meeting. A PDF of the slideshow is included as an attachment.

The following table lists project team members and TAC members in attendance.

| Name | Affiliation | Role |
|-----------------|-----------------------------------|------------------------|
| John Stark | Washington State University | Principal Investigator |
| Ani Jayakaran | Washington State University | Project Team Member |
| Myles Gray | Geosyntec Consultants | Project Team Member |
| Aaron Poresky | Geosyntec Consultants | Project Team Member |
| Dylan Ahearn | Herrera Environmental Consultants | TAC Member |
| Anita Fichthorn | Port of Tacoma | TAC Member |
| Doug Hutchinson | Seattle Public Utilities | TAC Member |
| Tarelle Osborn | Osborn Consulting | TAC Member |
| Eric Strecker | Terraphase Engineers | TAC Member |

Kickoff Call Outline

The call used the following outline:

- TAC Member Introductions
- General Overview of Research
- TAC Expectations and Schedules
- Outlet Control Conceptual Overview
- Research Details:
 - o Research Goals
 - Experimental Design
 - Monitoring Phases
 - Sampling and Monitoring Types
 - o Reporting and Modeling
- Question and Answer

Significant Questions and Comments

The TAC asked various clarifying questions about the research plan. The following significant questions and comments were raised during the call:

- Dylan Ahearn asked whether alternative media blends would be used in the study or if all
 mesocosms in the study would contain the standard Ecology 60 / 40 sand / compost blend. After
 discussion it was agreed that an alternative media blend should be used. The TAC supported
 using an alternative media blend based on the current nutrient-sensitive blends being
 developed under other ongoing SAM projects. Mr. Ahearn will advise on a specification and
 source for this alternative media blend.
- Anita Fichthorn asked what plant species would be included in the newly installed and newly planted mesocosms. After discussion, it was agreed to use typical drought tolerant rain garden vegetation such as rushes (Juncus sp.) and sedges (Carex sp.). Such plants would be different from the existing mesocosms which primarily contain red osier dogwood cultivars. Because six mature mesocosms will be included in the study without replacing the vegetation, they will contain different plant species than the newly planted mesocosms. This does not significantly affect experimental design. The purpose of the paired study is to compare media control versus outlet control for a range of design scenarios; not to compare different plant types.
- Dylan Ahearn asked about plans to dose the incoming stormwater to increase pollutant concentrations to more typical ranges for urban areas. Previous research at the facility has indicated that pollutant concentrations in runoff from the mesocosm catchment are lower than typical ranges found in urban runoff. The Research Team proposed to dose the influent water during water quality testing events, but not during typical operation. Dosing will be done to increase concentrations of nutrients, metals, and total suspended solids. If available, some of this dosing will be done by acquiring street sweeper waste from the City of Puyallup, as has been done previously. This will be researched by the project team.

The questions raised during the kickoff call will be incorporated in the Draft QAPP.

Attachments

A pdf version of the kickoff call slides is included as an attachment.